TWO MODES OF TRANSPORTATION

TRANSPORT REGULATION: A CENTENNIAL EVALUATION

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Transport regulation has been discussed so extensively and for so long a time that one feels called upon to justify a further addition to the already vast literature on this subject. Accordingly, two considerations are offered in justification of the comments which follow. First, the year 1971 marks the one-hundredth anniversary of the Granger legislation in Illinois and Minnesota which initiated railroad regulation - long the only form of transport regulation - in its modern form.[1] The centennial of such a significant social institution would seem to be an especially appropriate occasion on which to re-examine the forces influencing its origin and evolution, to consider its present status, and to speculate with respect to possible future developments.

Second, for the first time in many years legislation has recently been introduced in Congress involving a fundamental change in the underlying philosophy of transport regulation, a development reflecting the barrage of criticism which interested parties have directed at both regulatory policies and the institution of regulation itself during the past few years. Hence, at the threshold of our second century of transport regulation an opportunity has been presented to achieve a basic reorientation of such regulation comparable to that brought about by the passage of the Transportation Act of 1920.

A distinguished transportation economist once remarked that American public policy with respect to transportation has passed through three stages which could be epitomized by the words generosity, animosity, and reciprocity. The stage of generosity refers, of course, to the period before 1870, in which a lively appreciation of the key role of improved transportation in promoting economic development was reflected in land grants and other public aids to transportation on a lavish scale. During this period rate regulation was limited to maximum rate provisions inserted in railway charters and was largely ineffective. The stage of animosity was initiated by the Granger legislation of the 1870's and lasted until the passage of the Transportation Act of 1920. This period was marked by a revulsion of feeling toward the railroads which manifested

itself in a growing body of restrictive regulation, both state and federal. The function of such regulation was conceived narrowly as the correction of specific abuses connected with the rise of railroads as large-scale enterprises.

The stage of reciprocity, which was ushered in by the passage of the Transportation Act of 1920, has been marked by an important modification of the earlier policy of enforced competition, especially as applied to railroads, by the extension of regulatory jurisdiction to all major modes of intercity transportation, and, most importantly, by a fundamental change in the underlying philosophy of regulation. Whereas earlier controls were merely negative and restrictive, the rule of rate-making in the Transportation Act of 1920 and the Declaration of National Transportation Policy in the Transportation Act of 1940 recognized, at least implicitly, reciprocal obligations on the part of both the public and the carriers. As before, carriers had an obligation to provide adequate and efficient service at reasonable rates, but now there was also recognized a public obligation to provide a statutory and administrative framework which would enable the carriers to meet their obligations. An examination of the forces shaping this evolution of public policy may aid in understanding and evaluating the present situation and possible future developments in this area.

I

Inasmuch as the economic rationale of railway rate regulation is fairly familiar a very brief consideration of this matter will suffice. The need for regulation arises from certain economic characteristics of the railways which reflect their highly capital-intensive technology, particularly, the fact that they operate under conditions of short-run and long-run decreasing unit cost over a wide range of output. They tend to be natural monopolies in the sense that because of the latter characteristic one railroad can serve most individual markets at lower unit cost than two or more. Where a given market is served by more than one railroad the economic characteristics of the industry insure that the number of competitors will be small enough to constitute what economists call a duopoly of oligopoly.

In view of some matters to be referred to later it will be desirable to have in mind certain facts concerning the functioning of duopoly and oligopoly markets. In such markets competition tends to be shifted from a price to a non-price basis; when price competition does occur sporadically under

the pressure of a desire to utilize idle capacity it usually takes the form of a price war and tends to be self-eliminating. Unrestrained rate competition under these circumstances was costly to the railways as well as highly unsatisfactory to shippers because of the resulting extreme instability of rates and gross discrimination in rates as between competitive and noncompetitive points. Hence, regulation was sought in order to secure relief not only from monopolistic ratemaking but also from the type of ratemaking prevailing in imperfectly competitive transport markets.

While the economic characteristics of railways, just referred to, serve to explain why the adoption of some type of control over their rates would be almost inevitable they do not completely explain the choice of direct regulation as a method of control. A number of other industries display economic characteristics similar to those of the railways, and some firms in these industries, through patents, control of natural resources, and other means, may exercise a degree of market control at least comparable to that of the railroads. Yet, these industries have not been subjected to direct price regulation of the type applied to the railroads.[2]

The question, therefore, arises as to why the decision was made to subject railways to direct regulation rather than relying upon the policy of maintaining competition applied to industry generally. The answer, apparently, is that simply because the railways were the first big business to display the economic characteristics in question they were considered to be unique in this respect and, therefore, thought to be properly subject to policies different from those then followed with respect to business generally. Confronted with what they believed to be a unique problem legislatures and courts, not surprisingly, fell back upon the special restrictions and obligations imposed upon common carriers and other public callings under early common law as a precedent for the new venture in direct control of railway rates. Later, when it became apparent that the economic characteristics believed to be peculiar to railways were actually characteristic of many kinds of business, antitrust laws were adopted as a general solution to the problem of controlling monopoly and competitive practices, but by that time railway regulation was firmly established.

It could be argued, therefore, that railway regulation might not have been undertaken if the development of large-scale enterprise in business generally had preceded rather

than followed the development of railroads.[3] It seems probable, however, that regulation would eventually have been adopted even under the latter circumstances, in view of the special problems of control presented by the complexity of railroad rate structures, the pervasive importance of such structures as a factor in the location and profitability of business in general, and the absence of alternatives to rail transportation, save for the peripheral availability of water transportation.

II

The foregoing comments relating to the economic rationale of railway rate control and the circumstances influencing the type of control adopted lead logically to consideration of the political basis of regulation; that is, to questions regarding the identity, motivation, and influence of the interest groups responsible for initiating regulatory legislation and shaping its content. It is generally understood, of course, that the Granger legislation represented a revolt by farmers and their small-business allies against unjustly high and discriminatory rates and various other abuses of which the railroads were alleged to be guilty. However, resentment against railroad rate abuses had developed earlier in other parts of the country, but the antirailroad sentiment was not sufficiently strong to lead to corrective measures. It was the compounding of railroad abuses with the operation of the more fundamental economic factors responsible for the post-Civil War agricultural distress that provided the necessary impetus for the Granger legislation. Such legislation had strong appeal because of a belief that farmers would receive higher prices for their products if the charges of railroads and other middlemen were reduced. It is worthy of note, parenthetically, that even after the railroads had been strictly controlled for many years a demand for reduction of freight rates as a means of alleviating the agricultural distress following World War I led to the passage of the Hoch-Smith Resolution in 1925.

The Granger legislation was repealed in short order for a variety of reasons, except in Illinois, but another movement to restore effective control over railway rates began in the 1880's and extended into the first decade of the twentieth century. This movement was not limited to the Granger states and extended to the federal level. Meanwhile, a record-breaking 70,000 miles of railroad were constructed during the decade 1880-90, the increase in mileage in this decade exceeding the total mileage in existence in 1873. It was inevitable that

this development should greatly alter the problem of railway rate control. Whereas the level of rates was dominant among the major concerns in the Granger period unjustly discriminatory rates were regarded as the paramount evil at the time of the passage of the Act to Regulate Commerce in 1887.[4] In the words of Professor Glaeser, "It was clear that the Act [of 1887] was aimed principally at discrimination and rebating. So far as the general level of rates was concerned competition was relied upon, as before to prevent extortion.—Regulation of the worst forms of competition rather than regulation of rates may be taken as the real objective of the interstate commerce law in its original form."[5]

Some recent writers argue that this change in the problem of railway rate regulation, from control of monopoly to control of rate wars and discrimination, requires a radical revision of previously accepted views concerning both the political basis and motivation of the Interstate Commerce Act and its economic merits. The older view, illustrated by the monumental work of Professor Sharfman,[6] treats federal railway regulation, like the earlier Granger legislation, as a response to the widespread demand of farmers and businessmen for protection against monopolistic and unjustly discriminatory railway rates. More generally, regulation was implicitly viewed as a means by which government, as a neutral party, undertook to redress the balance of economic power as between the general public and big business.

An almost diametrically opposed view is expressed in the recent works of Professors Kolko and Hilton.[7] They contend that federal railway regulation was primarily a response to the demands of the railroads themselves rather than the shippers. In Kolko's words, "the railroads, not the farmers and shippers, were the most important single advocates of Federal regulation from 1877 to 1916".[8] The railroads had been unsuccessful in checking the rate wars, declining rate levels, and shrinking profits associated with the period of rapid growth of railroad mileage. Hence, it is said that the railroads welcomed rather than opposed federal regulation as a means of achieving the rate and profit stability which they had been unable to maintain by their own. Railway regulation was to favor the railroads at the expense of shippers and consumers by accomplishing the cartelization of what they hold to be an "inherently competitive" industry.

In our opinion, neither of the foregoing views can be accepted as correct. On the one hand, the older view is

inadequate and somewhat naive in failing to recognize the full extent to which the legislation in question represented a compromise between the conflicting objectives of a variety of interests, including the railroads as well as various shipper groups, each of which sought to use government to further its own ends. On the other hand, the Kolko-Hilton view seriously understates the importance of shipper influence in shaping this legislation and errs in holding that the railway industry is inherently competitive. The price wars which Kolko cites as evidence that the markets for rail transport were competitive indicate instead the existence of duopoly or oligopoly. As previously explained, price competition is not normally-active in such markets and when sporadically-active works unsatisfactorily to all concerned. Moreover, because of the decreasing cost character of railroads an attempt to enforce price competition under such circumstances would be futile in the long run and undesirable even if it were possible. The result would be wasteful duplication of plant, failure to achieve lowest unit cost, and unjustified discrimination. Hence, contrary to Kolko and Hilton, we conclude that resort to regulation was in the interest of shippers and consumers and that this is no less true merely because regulation was also in the interest of the carriers.

One further point must be made in this connection. As previously stated, federal railway legislation did not reflect primarily the interests either of the railroads or of any particular shipper group, but represented a compromise between the conflicting special interests of all parties affected. However, the extent of the conflicting interests must not be exaggerated. Although the various parties had sharply divergent ideas with respect to the specific legislative provisions desired, they nevertheless had a common interest in promoting the passage of federal railway legislation of some sort. Such legislation was sought as one means of protecting established business positions from the disruptive influences of the growth of large-scale enterprise and the widening of markets associated with the expansion of the railway network.[9]

III

The foregoing discussion concerning the forces responsible for the Interstate Commerce Act in its original form leads logically to questions with respect to the subsequent evolution of the law and experience thereunder. Consideration of this topic will be limited to an analysis of certain influences which have greatly affected the functioning of

regulation throughout its history and which have an important bearing upon the current transport situation.

One difficulty which transport regulation shares in common with all other social institutions it that of adjustment to the general process of social change. Sociologists use the term cultural lag to describe the lagging adjustment of social institutions to changes in technology and other environmental conditions with which they are functionally related, and find in these so-called cultural lags the source of many social maladjustments.[10] The lags are attributable to inertia, conservatism, the opposition of vested interests, and similar factors.

The relevance of this concept in interpreting our experience with transport regulation can be readily demonstrated. As previously stated, the philosophy of regulation prior to 1920 was negative and restrictive. The law was concerned almost exclusively with protecting individual shippers and groups of shippers from unreasonable and unjustly discriminatory rates; it was not considered necessary to give the Interstate Commerce Commission specific responsibility for maintaining an adequate level of rates. A policy of enforced competition was relied upon to prevent an unreasonably high level of earnings, and it apparently did not occur to anyone that earnings could be too low to permit the desired quality of railway service.

The accidental circumstance that the railways were enjoying a long period of declining costs by reason of falling price levels and rapid technological advance obscured the inadequacy of these regulatory policies for some time. However, by 1910 technological advances were no longer able to offset the effect of rising price levels on railway costs, and the carriers began to feel an earnings pinch. In the _Advanced Rate_ cases, beginning in 1911, the Commission gave only meager relief, partly because of the lack of a statutory directive for the regulation of earnings, partly because it was not satisfied with the carriers' proof of need, and partly because the carriers' financial problems were aggravated by financial malpractices and wasteful rate and service policies over which it then had no control. Consequently, the railroads were unable to provide facilities adequate to handle the upsurge of traffic following the outbreak of World War I. Serious congestion and car shortages developed, and the government was forced to take over operation of the railroads after our entry into the war in order to avert a threatened collapse of service.

The lessons of this experience prompted a reexamination of overall regulatory policy which resulted in passage of the Transportation Act of 1920. This measure, by abandoning the earlier restrictive approach to rate regulation and by enlarging the Commission's statutory authority, corrected the principal regulatory weaknesses of the preceding period, but, in retrospect, it is evident that this step should have been taken in 1887, or at least well before 1910.

Furthermore, the Transportation Act of 1920, though well designed to cope with the regulatory problems of the immediate past, failed to recognize the implications for regulatory policy of certain trends which were developing even before the measure became law. Passenger car registrations increased from 2.3 million in 1915 to more than 8 million in 1920 and truck registrations from 158 thousand to more than 1100 thousand, while the Federal-Aid Highway Act of 1916 marked the beginning of a program to provide adequate highways for the rapidly growing number of motor vehicles. Despite these facts it apparently did not occur to the framers of the 1920 law that motor-rail competition might significantly alter the transport regulatory problem in the near future.

As it turned out, problems directly and indirectly related to intermodal competition were soon to become the dominant concern of the Interstate Commerce Commission. Yet, although the Commission's jurisdiction was extended to all forms of surface transportation, neither regulatory philosophy nor the governing statute have as yet been changed in ways which would enable regulation to function satisfactorily under a regime of intermodal competition. Such competition has been unduly restrained largely in an effort to maintain a value of service type of rate structure, which was appropriate so long as railroads were the predominant means of intercity transportation but which is neither practicable nor desirable in a regime of intermodal competition. This situation has contributed heavily to the financial difficulties of the railroads and has resulted in a serious misallocation of traffic among the various modes of transportation, the additional cost of which to the shippers has been estimated at hundreds of millions of dollars. A general reorientation of regulatory policy, comparable to that represented by the Transportation Act of 1920, is clearly long overdue. The Transportation Regulatory Modernization Act of 1971, recently proposed by the Department of Transportation, is the first serious attempt to remedy the existing regulatory lag, but the prospects for passage of this or similar legislation in the near future are highly uncertain at best.

IV

The functioning of transport regulation over the years has been fundamentally affected not only by the regulatory lags just discussed but also by the related fact that such regulation has always been an important instrument of economic policy. The implications of this latter fact have sometimes been overlooked or misinterpreted. Thus, it sometimes has been said that the purpose of regulation is to achieve so far as possible the results of competition in markets which are monopolistic or imperfectly competitive, the implication being that regulation directed toward any end, other than maintaining a workably competitive market, would run counter to the goal of maximizing economic welfare. Actually, this may or may not be the case. It should be recalled that theoretically even purely competitive resource allocation will maximize economic welfare only under the assumption that the resulting income distribution is optimal. In any event, in a democracy it is inevitable that government will intervene in many ways to alter the income distribution produced by the working of the market mechanism.

Considerations of this latter sort explain why regulation from the outset has found it advantageous to accept, with modifications, the discriminatory pricing system which the railroads had established in their own interest. Thus the Interstate Commerce Act, although prohibiting all discrimination between similarly situated persons, forbids only "unjust" discrimination or "undue" preference or prejudice as between different localities and kinds of traffic. The railroads had learned that high rates could be charged on manufactures without greatly affecting their movement, because even high rates had only a small effect upon the selling price of goods; conversely, low-value agricultural products and raw materials would move in substantial quantity only at rates not much above variable costs, but if moved in large volume would nevertheless make a substantial contribution toward meeting the fixed costs. Hence, although the midwestern farmers of the 1870's and 1880's complained that even the preferential rates which they enjoyed were too high, their interest in maintaining a so-called value of service rate structure clearly paralleled that of the railroads. Furthermore, this type of ratemaking, by making it possible to build railroads into undeveloped areas, contributed to the national policy of rapid settlement of the West.

It may reasonably be inferred, therefore, that public support for railway regulation arose in part from a desire

to take advantage of the opportunity, which the value of service rate system afforded, to charge high rates on some kinds of traffic in order to maintain preferential rates for the benefit of particular regions or industries, the promotion of which could be rationalized by appeal to some sort of general welfare argument. It was also recognized that this type of rate structure, by making possible fuller utilization of railway plant, resulted in reduced cost of transportation for all traffic; so that even the high-rated traffic benefited provided the lower-rated traffic covered variable costs and made the maximum possible contribution toward the fixed costs.[11] However, over the years value of service ratemaking has resulted in an increasing number of instances of cross-subsidization, under which profitable traffic has been made to absorb losses on services maintained for political reasons or to protect vested interests. Important examples are the handling of small shipments by motor carriers and, until recently, rail passenger service. As one writer puts it, "regulation became a means by which politically desired or 'publicly needed' services could be financed and maintained even though operating at a loss."[12]

Furthermore, in discussing regulatory lags it was pointed out that an attempt to continue value of service ratemaking has been largely responsible for the failure thus far to develop a regulatory structure appropriate to a regime of intermodal competition, and that this regulatory lag has had very serious consequences for the transportation industry. The ultimate explanation of the refusal of Congress to pass the necessary corrective measures is to be found in the distributional effects which such measures would have on both shippers and carriers. A shift to a more cost-related rate structure would involve contraction of investment by both rail and motor carriers and would have adverse effects on politically influential beneficiaries of the present system, notably long-haul shippers of agricultural products and raw materials, small-volume shippers in isolated areas, and recipients of the below-cost rates just referred. Unfortunately, it has not been possible to make a quantitative estimate of the extent to which such losses would offset the reduction in aggregate outlay on transportation which a revision of the rate structure would make possible. In any event, corrective measures, if adopted, would have to be applied gradually because of the magnitude of the changes involved.[13]

Finally, a brief comment is necessary concerning a possible alternative to transport regulation. While the continued existence of regulation, hopefully of an improved sort,

is generally assumed there are some who contend that rate regulation should be abolished and replaced by antitrust controls. In support of this proposal it is said that transportation is now as competitive as many unregulated industries and that, therefore, the continuance of direct regulation is no longer necessary or desirable. However, it is important to note that antitrust is subject to the same lagging adjustments and economic policy pressures which, as we have noted, account for many of the difficulties with regulation. Furthermore, a large part of the effort of regulatory agencies is devoted to the control of discrimination, and this is an area in which antitrust performance has been particularly criticized.

For these and other reasons we conclude that in the case of transport a switch from regulation to antitrust offers no clear advantage and probably some disadvantages, particularly if it assumed that the scope and direction of regulation might be appropriately changed. In any case, in assessing the past record and future prospects of transport regulation we would do well to ponder an observation of a distinguished economist of an earlier generation, to the effect that "One should altogether despair of what the future may achieve who is compelled to condemn all that the past has done. That our predecessors saw imperfectly was unavoidable, but that they did not see at all is incredible."[14]

Footnotes

[1]We pass over the largely ineffectual earlier efforts to regulate railroads through charter provisions or by administrative commissions having investigatory powers but no authority to control rates. We also pass over the ineffectual and short-lived Illinois regulatory law of 1869. Finally, we are here concerned only with intercity transportation.

[2]They have been subject, of course, to maximum price controls imposed as a counter-inflationary measure under wartime conditions.

[3]"If railroads had developed in the late 1920's when a differently oriented approach to monopoly and unfair competition had been established, there might never have been commission regulation of transportation as we know it today." J. R. Meyer and others, Economics of Competition in the Transportation Industries (Cambridge, Mass.: Harvard U. Press, 1959), p. 10. However, the situation in the late 1920's is not comparable to that in the 1870's because of the substantial and

rapidly growing competition provided by motor carriers, water carriers, and pipe lines in the later period.

[4]The Granger legislation sought to preserve competition by forbidding the merger of competing railroad lines.

[5]M. G. Glaeser, Outlines of Public Utility Economics (New York: MacMillan Co., 1927), p. 268.

[6]I. L. Sharfman, The Interstate Commerce Commission (New York: The Commonwealth Fund, 5 Vols., 1931-37).

[7]Gabriel Kolko, Railroads and Regulation, 1877-1916 (Princeton: Princeton U. Press, 1965); George W. Hilton, "The Consistency of the Interstate Commerce Act," 9 Journal of Law and Economics 87-113 (Oct. 1966).

[8]Kolko, op. cit., p. 3.

[9]Edward A. Purcell, Jr., "Ideas and Interests: Businessmen and the Interstate Commerce Act," 54 Journal of American History 561-78 (Dec. 1967).

[10]W. F. Ogburn, Social Change (New York, The Viking Press, 1922), Part IV.

[11]On the other hand, discriminatory pricing, although advantageous from the standpoint of an individual carrier, contributed to over-investment in railway plant as a whole. Also, by causing the relative prices of goods to differ from their relative costs of production and distribution it has resulted in some distortion in resource allocation.

[12]Meyer and others, op. cit., p. 9.

[13]It is not suggested that elimination of all rate discrimination is either necessary or desirable, but rather that discrimination be restricted to special situations and not be adopted systematically for an entire rate structure.

[14]Prof. H. J. Davenport, quoted in D. F. Pegrum, Transportation; Economics and Public Policy (Homewood, Ill., R. D. Irwin, Inc., Rev. Ed., 1968), p. 310n.